

# Fact Sheet



## *For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: R30-06100016-2008  
Application Received: December 19, 2007  
Plant Identification Number: 061-00016  
Permittee: Consolidation Coal Company  
Facility Name: Blacksville No. 2  
Mailing Address: P.O.Box 24  
Wana, WV 26590

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Physical Location: Wana, Monongalia County, West Virginia  
UTM Coordinates: 560.47 km Easting • 4395.78 km Northing • Zone 17  
Directions: Approximately 1/2 mile NE of Wana and State Route 7 on County Road 1212

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### **Facility Description**

The facility is a coal preparation plant that includes a 115mm BTU/hr coal-fired thermal dryer and coal handling facility consisting of a wet wash plant with associated coal handling equipment. Facility SIC code is 1222.

### **Emissions Summary**

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Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2005 Actual Emissions
Carbon Monoxide (CO)	103.0	81.97
Nitrogen Oxides (NO <sub>x</sub> )	136.3	101.80
Particulate Matter (PM <sub>10</sub> )	87.0	37
Particulate Matter (PM <sub>2.5</sub> )	19.71	N/A

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Total Particulate Matter (TSP)	181.5	74.45
Sulfur Dioxide (SO <sub>2</sub> )	249.4	192.90
Volatile Organic Compounds (VOC)	129.2	76.78

*PM<sub>10</sub> is a component of TSP.*

Hazardous Air Pollutants	Potential Emissions	2005 Actual Emissions
Hydrofluoric Acid	2.0	0.86
Hydrochloric Acid	2.6	1.11
Total	4.6	1.97

*Some of the above HAPs may be counted as PM or VOCs.*

### Title V Program Applicability Basis

This facility has the potential to emit 103 tons of CO, 136.3 tons of NO<sub>x</sub>, 249.4 tons of SO<sub>2</sub> and 129.2 tons of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Consolidation Coal Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR5	Coal Preparation Plant
	45CSR6	Open burning prohibited.
	45CSR10	Sulfur Dioxide Emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Construction Permit
	45CSR16	NSPS
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	40 C.F.R. Part 60, Subpart Y	Coal Preparation Plant
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

## Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-0718C	1-20-2006	
R13-1551	1-12-1993	
CO-R13-E-2000-9	2-21-2000	
CO-R13, 14-95-41A	12-26-1995	
CO-R13, 14-95-41	8-24-1995	
CO-R5,13,14-93-6	6-24-1993	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

## Determinations and Justifications

According to 45CSR§10-8.2.c.1 the installation, operation and maintenance of a continuous monitoring system (for monitoring SO<sub>2</sub> emissions from the thermal dryer) meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 2 (PS2) shall be deemed to fulfill the requirements of a monitoring plan for the thermal dryer.

45CSR§10-4.1 sets a limit of 2000 ppmv for SO<sub>2</sub> emissions from thermal dryer stack which translates into 1815 lb/hr of SO<sub>2</sub> emission allowed according to following calculation:

$$(91,000 \text{ cu.ft/min}) \times (60 \text{ min/hr}) \times [(2000 \text{ ppm}/1,000,000) (\text{SO}_2) (\text{cu.ft/cu. Ft total})] \times (11\text{lbmol}/385 \text{ cu.ft}) \times (64 \text{ lb/lbmol SO}_2) = 1815 \text{ lbs/hr of SO}_2.$$

Hence meeting the SO<sub>2</sub> emission limit of 120.7 lb/hr in Section 4.1.11 shall show compliance with 45CSR§10-4.1 limit of 2000 ppmv.

In August and December of 2006, Consolidation Coal Company conducted thermal dryer stack testing at the Blacksville Preparation plant which showed the VOC emissions to be in excess of the permitted limit for the facility and the results were submitted to the Division of Air Quality (DAQ). Consolidation decided to retest the dryer for VOC. The VOC Verification Testing was conducted April 2007 and the VOC emissions were in compliance and the results were consistent with the 2003 stack test.

Stack testing for NO<sub>x</sub>, CO, and VOC's shall be performed within one hundred and eighty (180) days of permit issuance for thermal dryer unit(s), during maximum operating conditions to show compliance with permit limits. In the last stack testing performed on 12-14-06, PM emission rate was 54.13% of particulate loading limit in Section 4.1.11. Hence the next stack testing for PM has to be performed on or before 12-14-09. Subsequent testing shall be performed according to Sections 4.2.4 and 4.2.7 of this permit.

Based on scrubber design parameters and stack testing performed, the following are operating ranges for the scrubber that, if maintained, assume compliance with particulate limits:

Exit Gas temperature – 120-220 (Deg F)

Water Pressure to Scrubber (psig) – 14-30

Water Flow Rate to Scrubber – 640-1,053 GPM

Pressure Drop Across scrubber (inches H<sub>2</sub>O Pressure Drop) – 26-40

CAM – The thermal dryer is a major source for PM and SO<sub>2</sub> with 45CSR13 limits and has controls for PM and SO<sub>2</sub> to meet 45CSR13 limits; hence the thermal dryer is potentially subject to CAM for PM and SO<sub>2</sub>. Company submitted CAM plans for PM and SO<sub>2</sub> as a part of renewal application.

The existing Title V permit specifies a continuous compliance demonstration method (CEMS for SO<sub>2</sub> and Scrubber monitoring and recordkeeping for PM), as defined in 40 C.F.R § 64.1, hence the thermal dryer is exempt from CAM requirements according to 40 C.F.R § 64.2(b)(1)(vi).

For SO<sub>2</sub>: For this facility the **existing Title V permit** has CEMs monitoring, recordkeeping and reporting according to Sections 4.1.8, 4.2.6, 4.4.2 and 4.5.1 which meets the definition of “Continuous compliance determination method.” And a thermal dryer with CEMs is exempt based on 40 C.F.R. § 64.2(b)(1)(vi) and the rationale for the exemption is based on 40 C.F.R. § 64.3(d).

For PM: This facility uses wet scrubbers to collect particulate matter before the thermal dryer discharges the pollutants to the atmosphere. For this facility the **existing Title V permit** has continuous monitoring required by 40 C.F.R. 60 Subpart Y as stated in section 4.2.1 of existing Title V permit. Also, the existing Title V permit has monitoring and recordkeeping and testing in Section 4.2.4 to determine proper operating ranges for scrubbers so as to meet the permit limit for PM. The MRR (Monitoring, recordkeeping and reporting) requirements in existing Title V permit as stated above meet the definition of “Continuous compliance determination method”. And, a thermal dryer with enforceable scrubber and the MRR spelled out in the **existing Title V permit** is exempt based on 40 C.F.R. § 64.2(b)(1)(vi) and the rationale for the exemption is based on 40 C.F.R. § 64.3(a) & (b).

### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following: N/A

### **Request for Variances or Alternatives**

N/A

### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

### **Comment Period**

Beginning Date:	April 17, 2008
Ending Date:	May 19, 2008

All written comments should be addressed to the following individual and office:

U.K.Bachhawat  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Point of Contact**

U.K.Bachhawat  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

Due to EPA's comments the following has been added as a note to Section 4.2.1 of the permit:

Based on scrubber design parameters and stack testing performed, the following are operating ranges for the scrubber that, if maintained, assume compliance with particulate limits:

Exit Gas temperature – 120-220 (Deg F)

Water Pressure to Scrubber (psig) – 14-30

Water Flow Rate to Scrubber – 640-1,053 GPM

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